

We claim:

1. A method for treating CIP equipment, the method comprising:
  - (a) treating the CIP equipment with a multiple phase treating composition
  - 5 comprising a treating liquid phase and a treating gaseous phase; and
  - (b) rinsing the CIP equipment with a multiple phase rinsing composition
  - comprising a rinsing liquid phase and a rinsing gaseous phase;
  - wherein the CIP equipment comprises process equipment.
- 10 2. A method according to claim 1, wherein the process equipment comprises at least one of an evaporator, a separator, a fermentation tank, an aging tank, a beer storage tank, and a storage tank.
3. A method according to claim 1, wherein the process equipment is part of a food
- 15 industrial plant.
4. A method according to claim 1, wherein the process equipment is part of a beverage industrial plant.
- 20 5. A method according to claim 1, wherein the process equipment is part of a pharmaceutical industrial plant.
6. A method according to claim 1, wherein the process equipment is part of a chemical industrial plant.
- 25 7. A method according to claim 1, wherein the process equipment is part of a water purification industrial plant.
8. A method according to claim 1, wherein the treating gaseous phase comprises at
- 30 least one of air, nitrogen, and carbon dioxide.

9. A method according to claim 1, wherein the multiple phase treating composition comprises a sufficient amount of the treating liquid phase to treat the CIP equipment.

10. A method according to claim 1, wherein treating the CIP equipment comprises  
5 cleaning.

11. A method according to claim 1, wherein the multiple phase treating composition comprises a sufficient amount of treating gaseous phase to treat the CIP equipment.

10 12. A method according to claim 1, wherein the method further comprises:

(c) rinsing the CIP equipment with a second multiple phase rinsing composition comprising a second rinsing liquid phase and a second rinsing gaseous phase.

15 13. A method for treating CIP equipment, the method comprising:

(a) treating the CIP equipment with a multiple phase treating composition comprising a treating liquid phase and a treating gaseous phase;

(b) rinsing the CIP equipment with a multiple phase rinsing composition comprising a rinsing liquid phase and a rinsing gaseous phase; and

20 (c) sanitizing the CIP equipment with a multiple phase sanitizing composition comprising a sanitizing liquid phase and a sanitizing gaseous phase;  
wherein the CIP equipment comprises process equipment.

14. A method according to claim 13, wherein the process equipment comprises at  
25 least one of an evaporator, a separator, a fermentation tank, an aging tank, a beer storage tank, and a storage tank.

15. A method according to claim 13, wherein the process equipment is part of a food industrial plant.

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16. A method according to claim 13, wherein the process equipment is part of a beverage industrial plant.
17. A method according to claim 13, wherein the process equipment is part of a pharmaceutical industrial plant.
18. A method according to claim 13, wherein the process equipment is part of a chemical industrial plant.
19. A method according to claim 13, wherein the process equipment is part of a water purification industrial plant.
20. A method according to claim 13, wherein the treating gaseous phase comprises at least one of air, nitrogen, and carbon dioxide.
21. A method according to claim 13, wherein the multiple phase treating composition comprises a sufficient amount of the treating liquid phase to treat the CIP equipment.
22. A method according to claim 13, wherein treating the CIP equipment comprises cleaning.
23. A method according to claim 13, wherein the multiple phase treating composition comprises a sufficient amount of treating gaseous phase to treat the CIP equipment.
24. A method according to claim 13, wherein the method further comprises:  
(c) rinsing the CIP equipment with a second multiple phase rinsing composition comprising a second rinsing liquid phase and a second rinsing gaseous phase.
25. A multiple phase clean-in-place (CIP) system for treating CIP equipment using multiple phase flow, the multiple phase CIP system comprising:

a CIP fresh treatment tank for providing a liquid phase for a multiple phase treating composition;

a forced air source for providing a gaseous phase for the multiple phase composition; and

5 an injection port for injecting the liquid phase into the gaseous phase.

26. The multiple phase CIP system according to claim 25, further comprising a pump for pumping a sufficient amount liquid phase to adequately treat the CIP equipment with the multiple phase treating composition.

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